

STATEMENT OF BASIS

**Rohm & Haas LLC
4800 State Route 12
Elma, WA 98541
ST 5037**

The purpose of this statement of basis is to explain the need to modify the wastewater discharge permit and provide the basis for the change.

I. GENERAL INFORMATION

<u>Permittee:</u>	Rohm & Haas LLC 4800 State Route 12 Elma, Washington 98541
<u>Facility:</u>	Rohm & Haas LLC 4800 State Route 12 Elma, Washington 98541
<u>Discharge Location:</u>	City of Elma Wastewater Treatment Plant Latitude: 46° 59' 42" N Longitude: 123° 23' 00" W

II. MODIFICATION

The basis for this permit modification is to increase the average monthly flow limitation from 32,000 gallons per day (gpd) to 44,000 gpd and increase the maximum daily flow limitation from 48,000 gpd to 60,000 gpd.

By letter dated June 14, 2006, Rohm & Haas requested an increase in the average monthly and maximum daily flow limitations listed in the permit. The permitted discharge consists predominately of cooling water. Historically, Rohm & Haas recycled water five to six times through the cooling towers before the calcium concentration increased to a level that required replacement of cooling water. A high calcium concentration will form a deposit on the surfaces of the cooling equipment resulting in reduced cooling efficiency. Rohm & Haas determines the calcium concentration in the cooling water by measuring conductivity.

In March and April 2006, Rohm & Haas had to unexpectedly increase the average cooling water volume by 7,000 to 9,000 gpd. The cooling water could only be recycled three times, compared to the historical five or six times, before the conductivity level required blow-down and water replacement.

Coinciding with the increased demand for cooling water, the city of Elma began adding caustic to the water supply to decrease lead and copper concentrations. Although the city uses sodium hydroxide as the caustic

material, testing by Rohm & Haas indicates the calcium concentration in the water increased. As a result of the cooling water increase, Rohm & Haas has implemented calcium testing of the incoming water and the cooling tower blow-down to adjust the cycles and enhance system monitoring.

The city of Elma's Wastewater Treatment Plant has adequate capacity for the requested increase and the city has concurred with the request by Rohm & Haas.

This Statement of Basis will serve as an amendment to the permit and fact sheet.